Geometry Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Worksheet 6.3 Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Per: \_\_\_\_\_\_\_\_\_\_

Directions: Are you given enough information to determine whether the quadrilateral is a parallelogram? Explain.

1) 2) 3)

4) 5) 6)

60°

120°

12

12

60°

Directions: Decide whether each piece of given information alone is sufficient to prove that quadrilateral *ABCD* is a parallelogram. Explain.

A

D

C

B

E

7) E is the midpoint of  and  8) m∠ABC and m∠BCD = 180°

9)  and  10) ∠ABC ≅ ∠ADC, and ∠BAD ≅ ∠BCD

11)  and  12)  and 

13)  and  14) m∠BAD = 110° and m∠BCD = 110°

Directions: Determine what additional information is needed in order to prove that quadrilateral *ABCE* is a parallelogram.

A

B

C

D

E

15)  16) ∠DCA ≅ ∠BAC

17) m∠CDA + m∠DAB = 180° 18) 

19) 

Directions: Decide whether the quadrilateral is a parallelogram. Explain.

20) 21) 22) 24)

24) 25) 26) 27)